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NL PT SE**

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**AL LT LV RO SI**

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(71) Applicant:  
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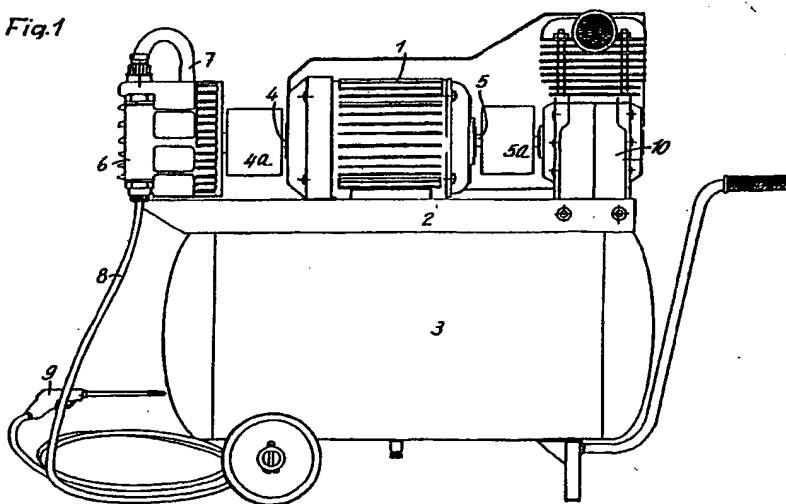
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**(54) Combined two-function air compressor and jet washer device**

(57) A combined two-function air compressor and jet washer device, comprising an electric motor (1) the shaft of which is provided with means for its selective connection to the air compression unit and to the jet washer pump, the electric motor being of the type having two directions of rotation, the means for selectively

connecting the shaft (4, 5) to the air compression unit (10) and to the jet washer pump (6) being two free wheels (41 and 51) mounted such that they have opposite dragging directions.

*Fig.1*

It is apparent that when the electric motor assumes the direction of rotation for which the free wheel 12 is active, the device operates as a jet washer because the operating cam 15 for the connecting rod 161 of the air compression unit 16 remains immobile as the respective free wheel 14 is idle. 5

In contrast, on reversing the direction of rotation of the motor 11 the free wheel 14 is locked and the air compression unit 16 is operated, whereas the free wheel 12 is idle and consequently the pump 13 is inactive. 10

Figure 4 shows a further embodiment in which the output shaft of the electric motor 17 has two ends 171 and 172 emerging from the casing.

On the end 171 there is keyed the free wheel 181 15 for connection to the pulley 182 operating the drive belt 183 for the air compression unit 184.

On the shaft end 172 there is keyed the free wheel 191 for connection to the jet washer pump 192 and having the opposite dragging direction to the free wheel 20 181.

The method of operation of this embodiment is the same as the preceding.

From the description it is apparent that all the objects of the invention relative to the ease of function switching from jet washer to air compressor and vice versa are attained, with the guarantee that only one of the two functions is active. 25

The invention is susceptible to numerous modifications all falling within the scope of the inventive concept, 30 for example the linkages comprising the free wheel which connect the electric motor to the pump and to the compressor can assume any form.

### Claims 35

1. A combined two-function air compressor and jet washer device, comprising an electric motor the shaft of which is provided with means for its selective connection to the air compression unit and to the jet washer pump, characterised in that the electric motor is of the type having two directions of rotation, the means for selectively connecting the shaft to the air compression unit and to the jet washer pump being two free wheels mounted such that they have opposite dragging directions. 40 45
2. A device as claimed in claim 1, characterised in that both the ends of the electric motor shaft emerge from the casing and are connected, via the free wheels of opposite dragging directions, to the air compression unit and to the jet washer pump respectively. 50
3. A device as claimed in claim 1, characterised in that only one end of the electric motor shaft emerges from the casing for connection via a first free wheel to the jet washer pump, and carries, by way of a 55

second free wheel with the opposite dragging direction to the first free wheel, the operating cam for a connecting rod of the air compression unit.

Fig. 2

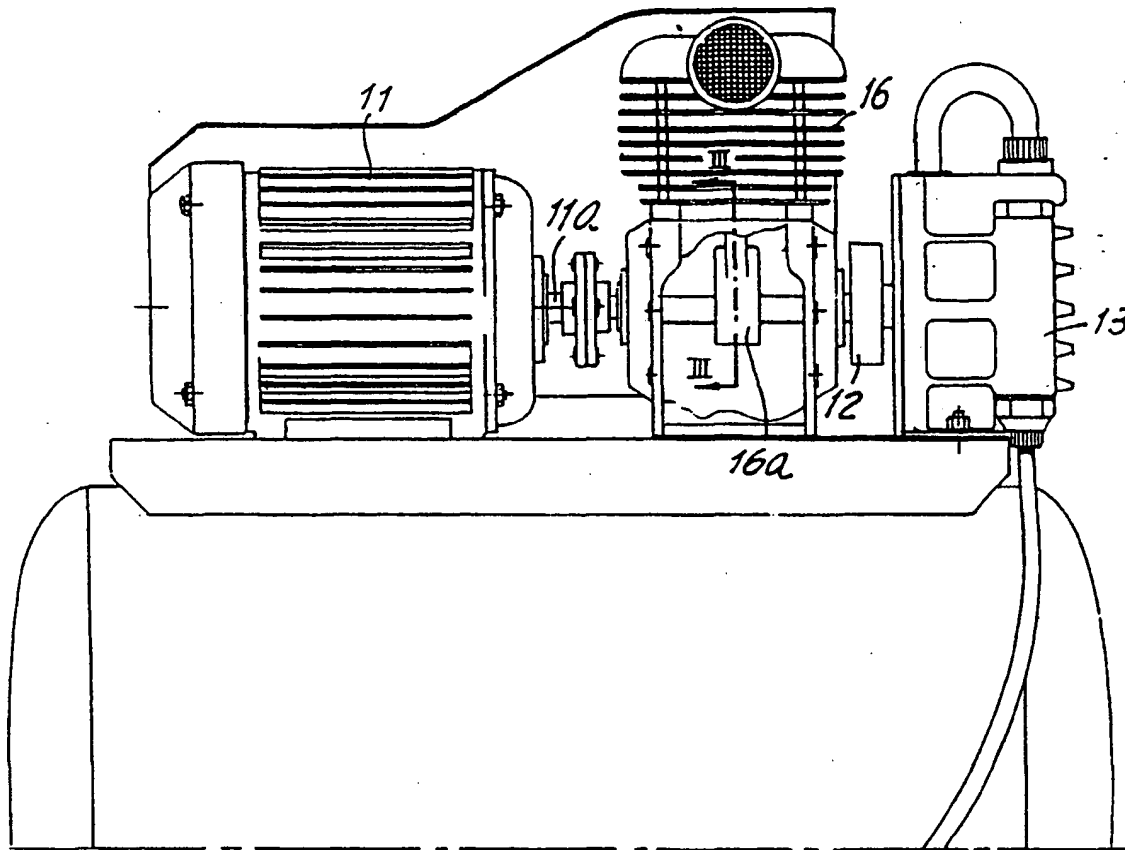


Fig. 4

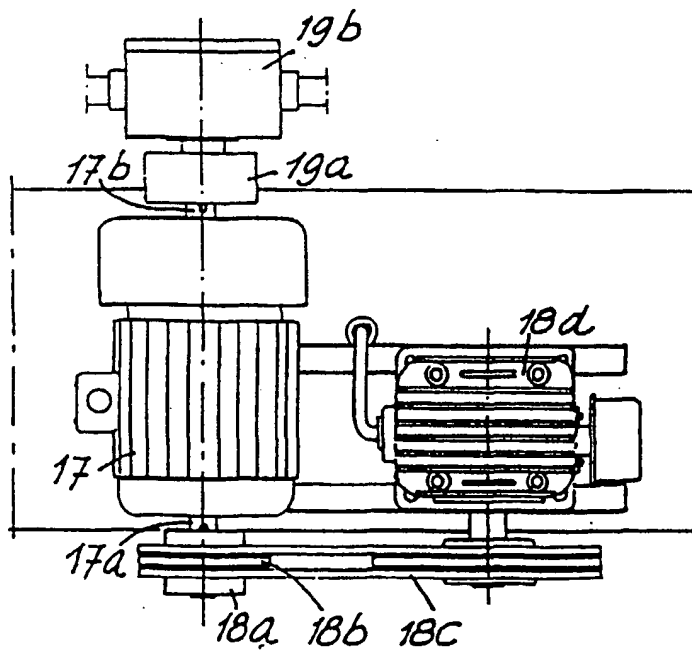
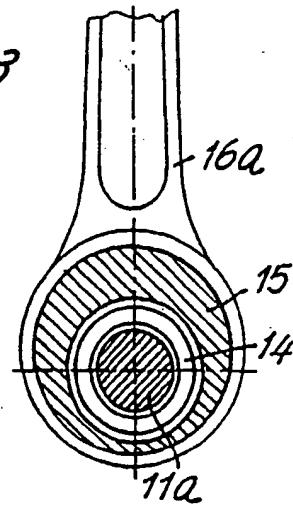


Fig. 3



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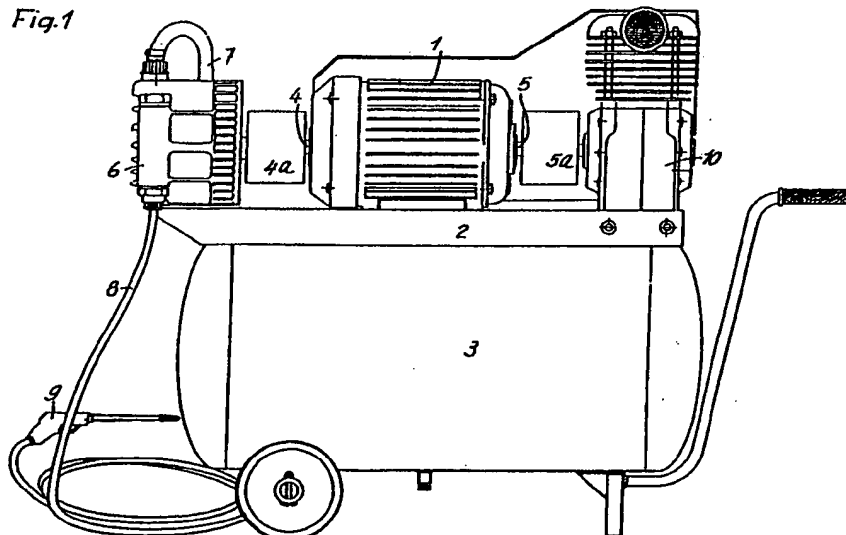
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*Fig.1*



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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 97 20 2738

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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19-04-1999

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